

A power amplifier system and a method for controlling a power amplifier in a power amplifier system. The method controls the power amplifier in a power amplifier system which has a loop by which a parameter proportional to the output power of the power amplifier is sensed and fed back to an error amplifier, and the output of the error amplifier is fed to a control input of the power amplifier as a control signal. The method adds an extra gain to the loop. By adding the extra gain, the loop will always be in an active condition, even at very low output power levels and at high power levels so as to provide for a more robust power regulation.

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